IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re patent application of

  Mittal et al.

  Serial No. 09/686,641

  Filed: October 10, 2000

  Group Art Unit: 3622

  Atty. Docket No.: JP920000234US1

  Examiner: Carlson, Jeffrey D.

  For: DYNAMIC ON-LINE LEARNING SYSTEM FOR ELECTRONIC
          COUPONS USING ON-LINE AUCTIONS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' APPEAL BRIEF

Sirs:

      This Appellants' Appeal Brief is in response to the Notice of Non-Compliant Appeal

Brief dated November 6, 2006 setting a one-month period for response, which was in response to

the Appellants' Appeal Brief of September 27, 2005, which was in response to the Notice of

Non-Compliant Appeal Brief dated September 21, 2005, which was in response to the

Appellants' Appeal Brief of June 20, 2005, which was in response to the Notice of Non-

Compliant Appeal Brief dated May 20, 2005, which was in response to the Appellants' Appeal

Brief of March 19, 2005 in which the Appellants respectfully appealed the final rejection of

claims 1-61 in the Office Action dated October 21, 2004. A Notice of Appeal was timely filed

on January 19, 2005.

I.   REAL PARTY IN INTEREST

The real party in interest is International Business Machines Corp., Armonk, New York, assignee of 100% interest of the above-referenced patent application.

II.   RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellants, Appellants' legal representative or Assignee which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III.   STATUS OF CLAIMS

Claims 1-5, 7-18, 20-24, 26-37, 39-43, 45-56, and 58-61 are all the claims pending in the application and are set forth fully in the attached appendix. Claims 1-61 were originally filed in the application. Appellants filed an Amendent under 37 C.F.R. §1.111 on June 28, 2004 amending the claims. Appellants filed an Amendent under 37 C.F.R. §1.116 on December 10, 2004 further amending the claims and cancelling claims 6, 19, 25, 38, 44 and 57. Applicants filed a supplemental Amendment under 37 C.F.R. §1.116 on June 20, 2005 amending claims 7, 8, 26, 27, 45, and 46 based on a telephonic interview between the undersigned attorney and the Examiner on June 16, 2005. Claims 1-5, 7-18, 20-24, 26-37, 39-43, 45-56, and 58-61 are being appealed. Claims 6, 19, 25, 38, 44 and 57 have been canceled. Based on the Office Action of October 21, 2004, claims 1-18, 20-37, 39-56, and 58-61 are rejected.

Claims 1-18, 20-37, 39-56, and 58-61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Freeny, Jr. (U.S. Patent No. 6,513,016), hereinafter referred to as "Freeny" in

view of Godin, et al. (U.S. Patent No. 5,890,138), hereinafter referred to as "Godin". Claims 19, 38 and 57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Freeny, Jr., in view of Godin and Schulze, Jr. (U.S. Patent No. 6,497,360), hereinafter referred to as "Schulze". Applicants respectfully traverse these rejections based on the following discussion.

IV.   STATEMENT OF AMENDMENTS

An after-final Office Action dated October 21, 2004 stated all the pending claims 1-61 were rejected. Appellants filed an Amendent under 37 C.F.R. §1.116 on December 10, 2004 further amending the claims and cancelling claims 6, 19, 25, 38, 44 and 57. An Advisory Action was issued on January 7, 2005 indicating that the Amendment filed on December 10, 2004 would be entered for purposes of appeal. A Notice of Appeal was filed on January 19, 2005. The original Appeal Brief was filed on March 19, 2005. A Notice of Non-Compliant appeal brief was issued on May 20, 2005. Applicants' undersigned legal representative and the Examiner conducted a telephonic interview on June 16, 2005 in which the dependency of claims 7, 8, 26, 27, 45, and 46 were discussed. An agreement was reached for the Applicants to submit a supplemental Amendment under 37 CFR §1.116 to amend the dependency of claims 7, 8, 26, 27, 45, and 46, which were previously dependent on cancelled claims. The Examiner indicated that the supplemental Amendment under 37 CFR §1.116 should be filed concurrently with the amended appeal brief, and as such, would be entered for purposes of appeal. Applicants filed a supplemental Amendment under 37 CFR §1.116 based on the agreement reached in the telephonic interview on June 20, 2005. The claims shown in the appendix are shown in their amended form as of the June 20, 2005 amendment.

V.   **SUMMARY OF CLAIMED SUBJECT MATTER**

The invention is described in pages 3 through 20 of the specification and shown in

Figures 1 through 3 of the application as originally filed.

<u>**Claim 1**</u>:

A computing system comprising at least one processor, associated memory, storage and

input/output devices, said computing system being connected to a network of computing systems

and being used to generate promotional scheme parameters for electronic coupons (page 3 of

specification, lines 6-9), said computer system comprising: means (page 14 of specification, line

3 referring to dynamic online estimator (2) of Figure 1) for automatically obtaining market

demand data from defined sources of online auctions, means (page 14 of specification, line 3

referring to receiving demand data from online auctions (1) of Figure 1; and page 20 of

specification, line 5) for conducting online actions using defined parameters for specified goods

and/or services for getting market information, wherein said parameters comprise non-

quantitative attributes comprising cultural attributes of bidders of the online auctions (page 15 of

specification, lines 15-23), means (page 14 of specification, lines 4-5) for storing and analyzing

the data obtained from said online auctions or said conducted auctions to estimate demand and

calculate promotion scheme parameters for issue of redeemable electronic coupons, wherein said

means for storing and analyzing the demand data is a statistical means (page 14 of specification,

lines 5-13 and Figure 1) that generates the promotion scheme parameters for different market

segments and receives the data from an electronic coupon issuing system as a feedback in order

to dynamically learn, adapt and improve generation of said promotion scheme parameters, and

means (page 14 of specification, lines 5-6 referring to electronic coupon system (4) of Figure 1)

for generating said redeemable electronic coupons.

Claim 2:

The means for obtaining demand data from online auction includes ability to access different types of auctions including sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions (page 18 of specification, lines 15-17).

Claim 3:

Wherein the means for obtaining the demand data from online auctions is through software means (page 20 of specification, lines 3-5) to start capturing the demand data from the time the auction starts to the time it ends.

Claim 4:

Wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders (page 14 of specification, lines 14-18).

Claim 5:

Wherein the demand data further includes the information specific to particular auction types including the opening price and the successive decrements in case of descending ("Dutch") auctions (page 14 of specification, lines 18-20).

<u>Claim 7</u>:

Wherein said statistical means includes: means (page 14 of specification, line 21 through page 15, line 2) for estimating the market demand curve and the price elasticity for an auction item or product or service for a plurality of demand data sources, and means (page 15 of specification, lines 3-9) for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

<u>Claim 8</u>:

Wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme (page 15 of specification, lines 10-14).

<u>Claim 9</u>:

Wherein said means for estimating the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market wiling to buy the product at zero price (page 16 of specification, lines 7-22).

<u>Claim 10</u>:

The system further comprising means for suggesting the discounting of a substitute of the product or item or service being auctioned (page 16, line 23 through page 17, line 11 of the specification).

Claim 11:

Wherein said item being auctioned is a competitor's item and the substituted product is promoter's own (page 16 of specification, line 23 through page 17, line 11 and referring to Figure 2).

Claim 12:

Wherein the means for obtaining the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments (page 17 of specification, lines 12 through page 18, line 3 and referring to Figure 3).

Claim 13:

The system further including means (page 18 of specification, lines 4-14) for suggesting discounting of a cross selling or an up selling product to the product being auctioned.

Claim 14:

Wherein said means for estimating the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used (page 18 of specification, lines 15-22).

Claim 15:

Wherein said means for estimating the market demand curve for an individual item uses

demand data where multiple units of items are auctioned (page 19 of specification, lines 7-15).

Claim 16:

Wherein said means for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels (page 19 of specification, lines 7-15).

Claim 17:

Wherein said means for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction (page 19 of specification, lines 16-23).

Claim 18:

The system further including means (page 20 of specification, lines 1-10) for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

Claim 20:

A method for generating promotional scheme parameters using electronic coupons (page 6 of specification, lines 11-12), characterized in that it includes: automatically obtaining market demand data from defined sources of online auctions (page 14 of specification, line 3 referring to dynamic online estimator (2) of Figure 1), conducting online auctions using defined parameters for specified goods and/or services (page 14 of specification, line 3 referring to receiving demand data from online auctions (1) of Figure 1; and page 20 of specification, line 5), wherein

said parameters comprise non-quantitative attributes comprising cultural attributes of bidders of

said online auctions (page 15 of specification, lines 15-23), storing and analyzing the market

demand data obtained from said online auctions or said conducted auctions to estimate demand

and calculate promotion scheme parameters for issue of redeemable electronic coupons (page 14

of specification, lines 4-5), wherein storing and analyzing of the demand data is by a statistical

method that generates the promotion scheme parameters for different market segments (page 14

of specification, lines 5-13 and Figure 1), and wherein storing and analyzing the demand data

receives the data from an electronic coupon issuing system as a feedback in order to dynamically

learn, adapt and improve generation of said promotion scheme parameters, and generating said

redeemable electronic coupons (page 14 of specification, lines 5-6 referring to electronic coupon

system (4) of Figure 1).

Claim 21:

Wherein obtaining demand data from online auction includes ability to access different

types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse

auctions (page 18 of specification, lines 15-17).

Claim 22:

Wherein obtaining the demand data from online auctions is through software to start

capturing the demand data from the time the auction starts to the time it ends (page 20 of

specification, lines 3-5).

Claim 23:

Wherein the demand data comprises of the names of products or services being

auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of

the auction, the duration of the auction, the total number of bids received for each product or

service, market segment of the bidders (page 14 of specification, lines 14-18).

Claim 24:

Wherein the demand data further includes the information specific to particular auction

types such as the opening price and the successive decrements in case of descending ("Dutch")

auctions (page 14 of specification, lines 18-20).

Claim 26:

Wherein said statistical method includes: estimating the market demand curve and the

price elasticity for an auction item or product or service from a plurality of demand data sources

(page 14 of specification, line 21 through page 15, line 2), and determining if an item or product

or service is amendable to price discrimination based on said estimated demand curve and price

elasticity (page 15 of specification, lines 3-9).

Claim 27:

Wherein said promotion scheme parameters include the collection of items or products or

services to be discounted, the amount of discount, the nature of discount, market segment for the

promotion scheme, duration of promotion scheme and identification of methods of offering the

scheme (page 15 of specification, lines 10-14).

Claim 28:

Wherein estimating of the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market willing to buy the product at zero price (page 16 of specification, lines 7-22).

Claim 29:

The method further comprising suggesting the discounting of a substitute of the product or item or service being auctioned (page 16, line 23 through page 17, line 11 of the specification).

Claim 30:

Wherein said item being auctioned is a competitor's item and the substituted product is promoter's own (page 16 of specification, line 23 through page 17, line 11 and referring to Figure 2).

Claim 31:

Wherein obtaining of the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments (page 17 of specification, lines 12 through page 18, line 3 and referring to Figure 3).

Claim 32:

The method further comprising suggesting discounting of a cross selling or an up selling

product to the product being auctioned (page 18 of specification, lines 4-14).

Claim 33:

Wherein estimating of the demand curve uses the winning bid and the highest bids of all

the bidders for the case of open-cry or ascending auctions while for the descending auctions

namely, Dutch auctions only the winning bid is used (page 18 of specification, lines 15-22).

Claim 34:

Wherein estimating of the market demand curve for an individual item uses demand data

where multiple units of items are auctioned (page 19 of specification, lines 7-15).

Claim 35:

Wherein estimating of market demand curve uses the quantity demanded by an individual

buyer at various price levels (page 19 of specification, lines 7-15).

Claim 36:

Wherein estimating of the market demand curve information from the online auctions is

used to determine the decrement size in a descending or Dutch auction (page 19 of specification,

lines 16-23).

Claim 37:

The method further including method for the user to configure the sources of online

demand data as well as the parameters for conducting online auctions on a plurality of products

on specified URLs (page 20 of specification, lines 1-10).

Claim 39:

A computer program product comprising computer readable program code stored on

computer readable storage medium embodied therein for causing a computer to generate

promotional scheme parameters using electronic coupons (page 9 of specification, lines 12-14)

comprising: computer readable program code means configured for automatically obtaining

market demand data from defined sources of online auctions (page 14 of specification, line 3

referring to dynamic online estimator (2) of Figure 1), computer readable program code means

configured for conducting online auctions using defined parameters for specified goods and/or

services (page 14 of specification, line 3 referring to receiving demand data from online auctions

(1) of Figure 1; and page 20 of specification, line 5), wherein said parameters comprise non-

quantitative attributes comprising cultural attributes of bidders of said online auctions (page 15

of specification, lines 15-23), computer readable program code means configured for storing and

analyzing the data obtained from said online auctions or said conducted auctions to estimate

demand and calculate promotion scheme parameters for issue of redeemable electronic coupons

(page 14 of specification, line 4), wherein said computer readable program code means

configured for storing and analyzing of the demand data is a computer readable program code

means that generates the promotion scheme parameters for different market segments (page 14

of specification, lines 5-13 and Figure 1), and wherein storing and analyzing the demand data

receives the data from an electronic coupon issuing system as a feedback in order to dynamically

learn, adapt and improve generation of said promotion scheme parameters, and computer

readable program code means configured for generating said redeemable electronic coupons

(page 14 of specification, lines 5-6 referring to electronic coupon system (4) of Figure 1).

Claim 40:

Wherein said computer readable program code means configured for obtaining demand

data from online auction includes ability to access different types of auctions such as sealed-bid

auctions, open-cry auctions, Dutch auctions and reverse auctions (page 18 of specification, lines

15-17).

Claim 41:

Wherein said computer readable program code means configured for obtaining the

demand data from online auctions is through software to start capturing the demand data from

the time the auction starts to the time it ends (page 20 of specification, lines 3-5).

Claim 42:

Wherein the demand data comprises of the names of products or services being

auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of

the auction, the duration of the auction, the total number of bids received for each product or

service, market segment of the bidders (page 14 of specification, lines 14-18).

Claim 43:

Wherein said computer readable program code means configured for storing and

analyzing the demand data is a statistical computer readable program code means that generates

the promotion scheme parameters for different market segments (page 14 of specification, lines

5-13 and Figure 1).

Claim 45:

Wherein said statistical computer readable program code means includes: computer

readable program code means configured for estimating the market demand curve and the price

elasticity for an action item or product or service from a plurality of demand data sources (page

14 of specification, line 21 through page 15, line 2), and computer readable program code means

configured for determining if an item or product or service is amenable to price discrimination

based on the estimated demand curve and price elasticity (page 15 of specification, lines 3-9).

Claim 46:

Wherein said promotion scheme parameters include the collection of items or products or

services to be discounted, the amount of discount, the nature of discount, market segment for the

promotion scheme, duration of promotion scheme and identification of methods of offering the

scheme (page 15 of specification, lines 10-14).

Claim 47:

Wherein said computer readable program code means configured for estimating the

market demand curve is by considering the fractional demand at a particular price, the fraction of

population that is willing to pay the price, computing the product of the fractional demand and

the demand at zero price i.e. the size of the market willing to buy the product at zero price (page

16 of specification, lines 7-22).

Claim 48:

The computer program product further comprising computer readable program code

means configured for suggesting the discounting of a substitute of the product or item or service

being auctioned (page 16, line 23 through page 17, line 11 of the specification).

Claim 49:

Wherein said item being auctioned is a competitor's item and the substituted product is

promoter's own (page 16 of specification, line 23 through page 17, line 11 and referring to

Figure 2).

Claim 50:

Wherein the computer readable program code means configured for obtaining the

demand data includes the ability to cover multiple market segments and suggest a promotion

scheme targeted at different market segments (page 17 of specification, lines 12 through page 18,

line 3 and referring to Figure 3).

Claim 51:

The computer program product further including computer readable program code means

configured for suggesting discounting of a cross selling or an up selling product to the product

being auctioned (page 18 of specification, lines 4-14).

Claim 52:

Wherein said computer readable program code means configured for estimating the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used (page 18 of specification, lines 15-22).

Claim 53:

Wherein said computer readable program code means configured for estimating the market demand curve for an individual item uses demand data where multiple units of items are auctioned (page 19 of specification, lines 7-15).

Claim 54:

Wherein said computer readable program code means configured for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels (page 19 of specification, lines 7-15).

Claim 55:

Wherein said computer readable program code means configured for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction (page 19 of specification, lines 16-23).

Claim 56:

The computer program product further including computer readable program code means configured for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs (page 20 of specification, lines 1-10).

Claim 58:

Wherein the system is extended to learn about the state of online markets by mining information from current and past operations of similar online markets in order to devise differential strategies for various market segments (page 20 of specification, lines 11-16).

Claim 59:

Wherein said system is also used to provide for implementing optimal inventory management (page 18 of specification, line 23 through page 19, line 6).

Claim 60:

Wherein said system is integrated with an online electronic coupon generation system to provide a complete system for issuing of redeemable electronic coupons (page 14 of specification, lines 2-10; page 19, lines 5-6; and page 20, lines 5-10).

Claim 61:

Wherein a generated market demand curve and said promotion scheme parameters are used to provide a data discovery service to a plurality of buyers in various market segments who

use it for generating redeemable electronic coupons for their products or services (page 20 of

specification, lines 5-16).

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for review by the Board of Patents Appeals and Interferences are

whether claims 1-5, 7-18, 20-24, 26-37, 39-43, 45-56, and 58-61 are unpatentable under U.S.C.

§103(a) as being unpatentable over Freeny, in view of Godin and Schulze, and further in view of

Official Notice.

The Office Action indicates that with regard to claims 1, 4-6, 18, and 58-61, Freeny

teaches a computerized system that monitors sales, demand and inventory supply and

dynamically adjusts pricing. According to the Office Action, the system in Freeny enables

advertising/promotional pricing using coupons that can be printed for customers and redeemed.

The Office Action states that the coupon system in Freeny generates coupons that are

dynamically priced as determined by the system [abstract, 4:4-11, 6:32-37, 7:35-37, 11:1 6-27].

The coupon system in Freeny, as interpreted by the Office Action, is taken to be electronic as the

coupon data is stored on the computer and can be electronically changed. Further, according to

the Office Action, the coupons include UPC codes which are electronically scanned upon

redemption.

The Office Action suggests that while Freeny teaches several data inputs to the price

determination system, he does not teach the use of auction data. However, the Office Action

suggest that Godin teaches an online computer auction system which is used to sell goods.

According to the Office Action, Godin teaches that a feature of the auctions is the ability to track

the price/demand nature of the product. This, according to the Office Action, provides valuable

information to the manufacturer, instead of detailed testing, businesses can use auction data to determine price and demand information for specified products and a price demand curve can be created [7:60-8:5]. According to the Office Action, it would have been obvious to one of ordinary skill at the time of the invention to have looked to any source of pricing/demand data as an input to the system of Freeny including the auction-based data of Godin in order to create promotional pricing based upon a rich collection of price/demand data thereby creating more effective promotional pricing.

Regarding the auction-related parameters comprising non-quantitative attributes, Godin, as interpreted by the Office Action, teaches the collection and storage of user data such as name, address, city, province, postal code email address, telephone. This data is used in the online auction process, and according to the Office Action, each of these is taken to be a "non-quantitative attribute of a bidder." The Office Action goes on to indicate that while postal code and telephone fields each comprise numeric digits, the data is numeric code representing qualitative information such as the general area of location (area code) or more specific area of location (postal code). The Office Action posits that area codes and postal codes are often classified as demographic data and taken to be qualitative.

Even though this data is stored using digits, the information is not quantitative and it would never be used in arithmetic calculations as quantitative values (such as price, tax rates, etc) would be according to the Office Action. Nonetheless a person's name is clearly non-quantitative and represents a cultural attribute of that person as suggested by the Office Action. A person's city is non-quantitative and represents a cultural attribute of that person according to the Office Action. Culture is such a broad term that any characteristic can be used to define a culture; the types of people using American Express cards can be said to belong to a credit card

culture different than Visa card holders according to the Office Action. The type of credit card is non-quantitative data according to the Office Action.

As indicated in the Office Action, the "for getting market information" language is taken to be functional language and intended use and does not provide a positive limitation. Nonetheless, the combination provides an auction process and system for getting market information (price/demand data) so that promotional pricing can be dynamically created in the form of coupons as indicated in the Office Action.

Regarding claims 2, 3, and 17, the Office Action indicates that it would have been obvious to one of ordinary skill at the time of the invention to have electronically captured valuable auction data input for any well known auction types (such as Dutch auction, reverse auction, etc), so as to base pricing on a wide range of data in an automated manner.

Regarding claims 7, 9, and 14-16, the Office Action posits that the demand curves taught by Freeny inherently provide price elasticity based on the results of the auctions for a plurality of products and a plurality of quantities. The Office Action states that Official Notice is taken that it is well known to estimate demand curves in such a manner and it would have been obvious to one of ordinary skill at the time of the invention to have done so in order to model the price/demand data and determine an optimized promotion pricing. Regarding claim 16, the Office Action states that a price demand curve inherently associates quantities demanded and price, for a collection of individual buyers.

Regarding claim 8, the Office Action indicates that promotion coupon and advertising campaigns typically include such claimed parameters and it would have been obvious to one of ordinary skill at the time of the invention to have provided them in order to provide an effective promotion.

Regarding claims 10, 11, and 13, the Office Action states that Official Notice is taken that providing promotion pricing to encourage switching from a competitors product, and cross-selling and up-selling are well known marketing techniques; such would have been obvious to have employed in order to accomplish sales, as suggested by the Office Action.

Regarding claim 12, the Office Action concludes that plural auctions for different products can inherently define different segments based on the product type. According to the Office Action, a marketer could define segments in any imaginable way for a plurality of products. According to the Office Action, claims 21-38 and 39-57 are each rejected following the same reasoning as per claims 1-19 above.

With respect to claim 18, the Office Action suggests that selecting and providing the suggested auction-data input to the computerized pricing system functionality in order to output pricing decision and actions is taken to allow a user to "configure" the data sources. The Office Action goes on to state that the user implementing/building/programming the system of Godin determines which bidder data fields are required to use the auction system.

With respect to claims 19, 38, and 57, the Office Action indicates that Schulze teaches an electronic coupon promotional system where the coupon output is used as an input to the coupon system in order to provide a feedback loop to improve the system [abstract]. According to the Office Action, it would have been obvious to one of ordinary skill at the time of the invention to have fed back the results of the coupon system of Freeny/Godin as a closed loop system in order to improve results and provide a system that learns.

Regarding claim 58, the Office Action suggests that the system is taken to inherently "learn" about online markets by mining information from current and past operations of similar online markets. Regarding claim 59, the Office Action indicates that Freeny teaches that the

system monitors inventory levels and can adjust pricing, accordingly. According to the Office

Action, this is taken to provide optimal inventory management. Regarding claim 60, Office

Action suggests that the proposed combination provides an online electronic coupon generation

system. Regarding claim 61, the Office Action concludes that it would have been obvious to one

of ordinary skill at the time of the invention to have sold the marketing research to other firms so

that they may use the same techniques to price, promote and sell their products.

VII.   ARGUMENT

A.   The Prior Art References

1.   The Freeny Reference

Freeny teaches an automated product pricing system including a physical store system, a

virtual store system, and a control system. The physical and virtual store systems are capable of

transmitting sales data indicative of the number of sales of identified respective products. The

control system is adapted to receive the sales data from the physical store system and the virtual

store system. In response thereto, the control system generates price change data including a

changed price of an identified product based on the sales data received from at least one of the

physical and virtual store systems. The price change data is then transmitted by the control

system to at least one of the physical and virtual store systems to thereby change the price of the

identified product.

2.   The Godin Reference

Godin teaches an auction system is disclosed which allows users to participate using their

own computers suitably connected to the auction system. Preferably, this connection uses the

Internet. Godin involves a method and system for providing rapid feedback of a reverse auction

process and removes the user from the process once an indication to purchase has been received.

Rapid feedback in combination with security of information is achieved with the method and

auction system.

3. The Schulze Reference

Schulze teaches a method and apparatus for accurately collecting and promptly reporting

information in connection with the redemption of manufacturer coupons. The method includes

the collection of information from a retailer point-of-sale system, and the examination of

redeemed coupons. Where matches between product sales, discounts to consumers and

redeemed coupons can be made, payment to the retailer of discounts extended to consumers in

exchange for manufacturer authorized coupons is immediately made following such verification.

In addition, information concerning the redemption of coupons is made available to

manufacturers to enable them to adjust promotions to achieve the desired marketing effect. The

apparatus may comprise a central processing unit and attached peripherals capable of interfacing

with a retailer point-of-sale system and downloading information from the point-of-sale system,

together with secure storage for holding coupons that are to be verified by the apparatus.

B. Appellants' Position

1. Independent Claims 1, 20, and 39

Appellants respectfully traverse the rejections in the Office Action of independent claims

1, 20, and 39 based on the following discussion. The claimed invention, as provided in

independent claims 1, 20, and 39 contain features, which are patentably distinguishable from the

prior art references of record. Specifically, the independent claims 1, 20, and 39 include, in part, "means for automatically obtaining market demand data from defined sources of online auctions, means for conducting online actions using defined parameters for specified goods and/or services for getting market information, wherein said parameters comprise non-quantitative attributes comprising cultural attributes of bidders of said online auctions, means for storing and analyzing the data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons, wherein said means for storing and analyzing the demand data is a statistical means that generates the promotion scheme parameters for different market segments and receives the data from an electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve generation of said promotion scheme parameters, and means for generating said redeemable electronic coupons." There would simply be no motivation for one of ordinary skill in the art to combine Freeny, Godin, and Schulze together to try and teach the claimed invention. In Appellants' amendment of December 10, 2004, the independent claims 1, 20, and 39 were amended to include the limitations of previous dependent claims 19, 38, and 57 (now cancelled), and which were previously rejected by the Office Action of October 21, 2004 as being unpatentable over Freeny in view of Godin and Schulze.

Furthermore, Freeny in combination with Godin and Schulze is legally unjustified, especially since each of Freeny, Godin, and Schulze take mutually exclusive paths to solve wholly unique solutions, and do not provide motivation for combination with one another. Insofar as references may be combined to teach a particular invention, and the proposed combination of Freeny with Godin, and Freeny with Godin and Schulze, case law establishes that, before any prior-art references may be validly combined for use in a prior-art 35 U.S.C. §

103(a) rejection, the individual references themselves or corresponding prior art must suggest

that they be combined.

For example, in In re Sernaker, 217 USPQ 1, 6 (C.A.F.C. 1983), the court stated:

"[P]rior art references in combination do not make an invention obvious unless something in the

prior art references would suggest the advantage to be derived from combining their teachings."

Furthermore, the court in Uniroyal, Inc. v. Rudkin-Wiley Corp., 5 USPQ 2d 1434 (C.A.F.C.

1988), stated, "[w]here prior-art references require selective combination by the court to render

obvious a subsequent invention, there must be some reason for the combination other than the

hindsight gleaned from the invention itself. . . . Something in the prior art must suggest the

desirability and thus the obviousness of making the combination."

In the present application, the reason given to support the proposed combination is

improper, and is not sufficient to selectively and gratuitously substitute parts of one reference for

a part of another reference in order to try to meet, but failing nonetheless, the Appellants' novel

claimed invention. Furthermore, the claimed invention, as amended, meets the above-cited tests

for obviousness by including embodiments such as using non-quantitative parameters for

obtaining market information and the electronic coupon issuing feedback system. As such, all of

the claims of this application are, therefore, clearly in condition for allowance, and it is

respectfully requested that the Board pass these claims to allowance and issue.

As declared by the Federal Circuit:

> In proceedings before the U.S. Patent and Trademark Office, the Examiner bears
> the burden of establishing a prima facie case of obviousness based upon the prior
> art. The Examiner can satisfy this burden only by showing some objective
> teaching in the prior art or that knowledge generally available to one of ordinary
> skill in the art would lead that individual to combine the relevant teachings of the
> references. In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) citing In re
> Fine, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988).

Here, the Examiner has not met the burden of establishing a prima facie case of obviousness. It is clear that, not only does Freeny fail to disclose all of the elements of the claims of the present invention, particularly, the non-quantitative parameters for obtaining market information such as cultural attributes, as discussed above, but also, if combined with Godin and/or Godin with Schulze, fails to disclose these elements as well. The unique elements of the claimed invention are clearly an advance over the prior art.

The Federal Circuit also went on to state:

> The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. . . . Here the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Fritch at 1784-85, citing In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Here, there is no suggestion that Freeny, alone or in combination with Godin or with Godin and Schulze teaches a method and apparatus containing all of the limitations of the claimed invention. Consequently, there is absent the "suggestion" or "objective teaching" that would have to be made before there could be established the legally requisite "prima facie case of obviousness."

Graham v. John Deere Co., 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545, U.S.P.Q. 459 (1966) provides the correct factual inquiries which establish a background for determining obviousness under 35 U.S.C. §103(a). The cited tests clearly indicate that the claimed invention is unobvious in light of Freeny, Godin, and Schulze.

First, the scope and content of each of Freeny, Godin, and Schulze are clearly different from the claimed invention (see section VIII. A. 2-4 above). These references are each different

and wholly unique from the claimed invention, as Freeny generally describes an advertising technique, Godin generally describes an auction system, and Schulze generally describes a coupon system. Conversely, the claimed invention is directed to a system and method for generating promotional scheme parameters for electronic coupons using market demand data from online auctions. Thus, while the claimed invention incorporates aspects of each of auction, advertising, and coupon systems, they are clearly not the sole focus of the claimed invention. Furthermore, the prior art references to not discuss the market segment of the bidders being an important input to the promotional scheme design, whereas the claimed invention discusses how the market segment of the bidders from whom the demand curve is being determined be used to decide the market segment for electronic coupon distribution. In fact, different market segments may behave differently and this information is very useful to decide the discount value and time period for different market segments. Furthermore, the prior art does not discuss using multiple sources of demand data to arrive at promotional scheme parameters, which the claimed invention does. Thus, the scope and content of the prior art references are each unique from the claimed invention.

Second, there are significant elements of the claimed invention, which are neither taught nor suggested in each of Freeny, Godin, and Schulze. For example, Freeny's advertising system provides a pricing system based on purchasing trends of shoppers. Conversely, the claimed invention uses the market data to establish parameters for issuing redeemable coupons. Thus, the establishment of pricing structures for various goods is a different concept than generating coupons based on market demand data. In another example, Godin's auction system provides an auction for selling goods but does nothing to consolidate data from the auction to further a business model. Conversely, the claimed invention uses data obtained from online auctions to

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determine promotion scheme parameters for the subsequent issuance of redeemable electronic coupons. Furthermore, Schulze's coupon system does nothing to improve the generation of promotional scheme parameters used to generate electronic coupons.

Third, the level of one of ordinary skill in the art is that of a programmer who works in information systems. Thus, such an individual, at the time of the invention, would not find the claimed invention obvious in light of Freeny, Godin, and Schulze. In fact, it is unlikely that such an individual would have thought to combine the separate and distinct teachings in Freeny, Godin, and Schulze to yield the claimed invention. Furthermore, the Appellants' invention requires knowledge in four distinct areas: (1) economics; (2) marketing; (3) productions and operations management (POM); and (4) computer programming. The level of one of ordinary skill in the art is that of a typical computer programmer, who most likely does not have the requisite business and POM background to understand how the economics of demand data ties into the marketing aspects of auction types and using that information to program a computer system that is capable of processing a combination of that information. Again, the standard is one of ordinary skill in the art, not four individuals collectively skilled in the art. The Federal Circuit has indicated that a person of ordinary skill in the art is a hypothetical person. Custom Accessories Inc. v. Jeffrey-Allan Indus, 807 F.2d 955, 1 USPQ 2d 1196, 1201 (Fed. Cir. 1986). Surely, if the Federal Circuit had intended for the scope of "one of ordinary skill in the art" to mean more than one person, then they would have explicitly said so. As such, the standard is a hypothetical person not "more than one" hypothetical "people". Nonetheless, even if such a hypothetical individual existed and were to be so motivated, he/she would still fail to yield the claimed invention based on the combination of Freeny, Godin, Schulze, and so-called "well-known" precepts as discussed above, and further discussed below.

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Fourth, the manipulation of three separate and individually complex formulations which are provided in each of the prior art references, Freeny, Godin, and Schulze, individually, would not likely be easily combined by one of ordinary skill in the art in the manner suggested in the Office Action, let alone, in the manner provided by the claimed invention, which is indicative of the claimed invention being unobvious in light of Freeny, Godin, and Schulze. Additionally, the fact that three separate and distinct references must be combined to try and teach the invention, but failing nonetheless, is indicative of the claimed invention being unobvious. In fact, the USPTO has classified (based on the U.S. classification and international classification identifiers) the invention taught in Schulze differently than either Freeny or Godin. This strongly indicates that the references are non-analogous.

Thus, the claimed invention, as amended, meets the above-cited tests for obviousness by including embodiments such as storing and analyzing of the demand data is by a statistical method/means that generates the promotion scheme parameters for different market segments, and wherein storing and analyzing the demand data receives the data from an electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve generation of said promotion scheme parameters. As such, all of the claims of this application are, therefore, clearly in condition for allowance, and it is respectfully requested that the Board pass these claims to allowance and issue.

Furthermore, Appellants strongly suggest that Freeny says nothing regarding generating market information using parameters associated with bidders of online auctions. In fact, all of the parameters associated with the advertising system in Freeny relate to quantitative data relating to inventory, time spent at the on-line store, amount purchased, and price. For example, col. 11, lines 27-40 of Freeny state, "The owner control system 12 receives sales and inventory

data from the physical store systems 14 and/or the virtual store system 18. The sales and inventory data is indicative of product purchases, rate of product purchases and the remaining inventory at the physical store systems 14 and/or the virtual store system 18. Based on the sales and inventory data, the owner control system 12 is programmed to automatically output order data to order products from the product suppliers associated with the product supplier systems 16. The order data can be individualized for each of the physical store systems 14 and/or the virtual store system 18 so that the ordered products are shipped from the suppliers to the correct locations." As such, there is nothing in Freeny that suggests other non-quantitative factors are used to provide targeted advertising or for generating coupons.

Furthermore, col. 3, lines 14-33 of Freeny indicates that the inventors in Freeny envisioned that the owner control system 12 communicates with the physical store systems 14, and that the physical store systems 14 are located in physical locations such as shelves, boxes, slots, or other storage areas in retail supermarkets, drug stores, supply stores, inventory stocking areas, assembly sites, warehouses, or distribution facilities. Conversely, the claimed invention automatically obtains "market demand data from defined sources of online auctions." Such data is not derived from a physical location as in Freeny, but rather in a non-physical online auction. Again, Freeny specifically refers to "physical locations" and that the Freeny system is "envisioned" to be adaptable in physical locations and not in non-physical locations such as online auctions. While, the online auctions take place using computers, which are physical devices, it is the actual online auction (non-physical) which provides the data input from which electronic coupons are generated in the claimed invention. Thus, Freeny actually teaches away from the claimed invention and actually tends to suggest an undesirable combination with an auction system such as the one provided in Godin.

Similarly, Godin is also bereft of any language relating to non-quantitative parameters used in generating market information. As with Freeny, all of the parameters associated with the auction system in Godin relate to quantitative data relating to price, quantity of product available, and time intervals relating to the auction and the goods offered in the auction. For example, step 78 in Figure 2 of Godin suggests that the auction system in Godin gathers personal information. However, col. 4, lines 45-47 in Godin suggest that this personal information only relates to the user's "credit card number and expiry date." Furthermore, col. 7, lines 15-21 in Godin suggest storing user data in a database, whereby the data includes the "user's name and address and E-mail address, as well as credit card information." All of these parameters constitute quantitative parameters. As such, there is nothing in Godin that suggests other non-quantitative factors are used to provide targeted advertising or for generating coupons.

Likewise, Schulze does not teach or suggest using non-quantitative parameters for generating market information. In the coupon system in Schulze, there is no teaching relating any parameters attributed with the consumer's personal information/data to the coupon generation process. In fact, Schulze only very generically describes storing consumer data in the form of consumer identity "in connection with the sale of the product" (see col. 7 line 67 to col. 8 line 7 in Schulze). As such, there is nothing in Schulze that suggests parameters at all, let alone non-quantitative factors, are used to provide targeted advertising or for generating coupons.

Additionally, there is no suggestion in Freeny, Godin, or Schulze how non-quantitative factors could be stored, and most importantly, considered by the respective systems for generating coupons. This is truly a unique feature of the claimed invention, which is able to garner this type of information, store it, process it, and use it for generating coupons. Thus, even

if Freeny were combined with Godin or if Freeny were combined with both Godin and Schulze, it would still fail to teach or suggest to one of ordinary skill in the art how this generation of coupons would occur given an input of non-quantitative parameters.

The Office Action suggests that "[the word] culture is such a broad term that any characteristic can be used to define a "culture"." However, the Merriam-Webster dictionary generally defines "culture" as:

> The integrated pattern of human knowledge, belief, and behavior that depends upon man's capacity for learning and transmitting knowledge to succeeding generations; the customary beliefs, social forms, and material traits of a racial, religious, or social group; the set of shared attitudes, values, goals, and practices that characterizes a company or corporation.

The Office Action suggests that a person's name and city are considered to be cultural attributes of a person. However, based on the above-recited definition provided by a reference that is generally considered to be an acceptable and standard reference, it is evident that the interpretation of "cultural" provided in the Office Action is erroneous, overbroad, and legally unjustified.

In view of the foregoing, the Appellants respectfully submit that the cited prior art references do not teach or suggest the features defined by independent claims 1, 20, and 39 and as such, claims 1, 20, and 39 are patentable over Freeny alone or in combination with Godin or with Godin and Schulze.

2.   Dependent claims 2-5, 7-18, 21-24, 26-37, 40-43, 45-56, and 58-61

Appellants respectfully traverse the rejections in the Office Action of dependent claims 2-5, 7-18, 21-24, 26-37, 40-43, 45-56, and 58-61 based on the following discussion.

(a)   Dependent Claims 2, 21, and 40

Dependent claims 2, 21, and 40 generally provide, "wherein the means for obtaining demand data from online auction includes [an] ability to access different types of auctions including sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions." First, Freeny does not teach auction methodologies or auction systems. Second, Godin would not be combinable with Freeny for the reasons previously discussed in section VIII. B. 1. above. Third, Godin does not specifically address accessing different types of auctions, let alone accessing sealed-bid, open-cry, or Dutch auctions. In fact, the only practical references to Dutch auctions or silent auctions in Godin are in the Background section when referring to different types of auctions. However, the description of the auction system disclosed in Godin is bereft of any language relating to how its system would function with the different types of auction systems. In fact, Godin merely refers to "auctions" in the generic sense and does not describe the specifics of the types of auctions its system can work with. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 2, 21, and 40 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 2, 21, and 40.

(b)   Dependent Claims 3, 22, and 41

Dependent claims 3, 22, and 41 generally provide, "wherein said means for obtaining the demand data from online auctions is through software means to start capturing the demand data from the time the auction starts to the time it ends." First, Freeny does not teach auction methodologies or auction systems. Second, Godin would not be combinable with Freeny for the reasons previously discussed in section VIII. B. 1. above. Therefore, neither Freeny nor Godin

teach all of the elements of dependent claims 3, 22, and 41 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 3, 22, and 41.

(c)   Dependent Claims 17, 36, and 55

Dependent claims 17, 36, and 55 generally provide, "wherein said means for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction." First, Freeny does not teach auction methodologies or auction systems. Second, Godin would not be combinable with Freeny for the reasons previously discussed in section VIII. B. 1. above. Third, Godin does not specifically address descending or Dutch auctions. Again, Godin merely refers to "auctions" in the generic sense and does not describe the specifics of the types of auctions its system can work with including whether its auction system can work with Dutch auctions. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 17, 36, and 55 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 17, 36, and 55.

(d)   Dependent Claims 2, 3, 17, 21, 22, 36, 40, 41, and 55

The Office Action suggests that it would have been obvious to combine all of these features (of claims 2, 3, 17, 21, 22, 36, 40, 41, and 55) so as to base pricing on a wide range of data in an automated manner. However, Appellants assert that it would not have been obvious at the time of the invention to obtain demand data from different types of [online] auctions. It is important to remember that at the time of the filing of Appellants' application, October 10, 2000,

online auctioning was still relatively unrefined. While different auction sites may have existed,

there was no previous system or method which was capable of accessing data from the several

different types of auctions, and one of the reasons for this is because each online auction site

worked independently of one another and were often configured differently. That is, the online

presentation was configured differently for each of the various auction sites. Thus, the ability to

have one system being able to access differently configured online auction sites, coherently read

data, coherently retrieve the data, and coherently store the data on its on system was clearly not

established, nor would one of ordinary skill in the art readily understand how to undertake such a

significant task until the Appellants' invention.

Furthermore, even if one of ordinary skill in the art would find it obvious to retrieve data

from parts of some auctions, it is doubtful that the totality of the demand data could be parsed

from various online auctions. That is, the totality of the data from the time the various auctions

started until they ended. Clearly, such a task is an overwhelming achievement, which only the

Appellants' invention has provided. Those skilled in the art would not find such features

obvious due to the technological breadth associated with such features. Next, one of ordinary

skill in the art would hardly find it obvious to use the estimations of the market demand curve

information from various online auctions to determine the decrement size in a descending or

Dutch auction. These types of auctions are specific types of auctions and the ability to link

estimations of market demand curve information to the decrement size in these types of data

requires knowledge in four distinct areas: (1) economics; (2) marketing; (3) productions and

operations management (POM); and (4) computer programming. The level of one of ordinary

skill in the art is that of a typical computer programmer, who most likely does not have the

requisite business or POM background to understand how the economics of demand data ties

into the marketing aspects of auction types and using that information to program a computer

system that is capable of processing a combination of that information. The standard is <u>one</u> of

ordinary skill in the art, not <u>four collective</u> individuals collectively skilled in the art. Therefore,

dependent claims 2, 3, 17, 21, 22, 36, 40, 41, and 55 are patentable over Freeny in view of

Godin. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections

to claims 2, 3, 17, 21, 22, 36, 40, 41, and 55.

(e)   Dependent Claims 4, 23, and 42

Claims 4, 23, and 42 generally provide, "wherein the demand data comprises of the

names of products or services being auctioned, the bids from a plurality of bidders participating

in an auction, the reserve prices of the auction, the duration of the auction, the total number of

bids received for each product or service, market segment of the bidders." The Office Action

does not specifically address where in Freeny in view of Godin such features are described.

Clearly, Freeny cannot teach these features because Freeny deals with an advertising system

providing a pricing system based on purchasing trends of shoppers. Freeny has nothing to do

with auctions. Godin does not specifically describe considering the <u>market segment</u> of the

bidders of the auction. Additionally, Godin would not be combinable with Freeny for the

reasons previously discussed in section VIII. B. 1. above. Thus, combining Freeny with Godin

does not teach or render obvious the Appellants' claimed invention because neither Freeny nor

Godin teach all of the elements of dependent claims 4, 23, and 42 contrary to the broad assertion

in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw

the rejections to claims 4, 23, and 42.

(f)   Dependent Claims 5 and 24

Claims 5 and 24 generally provide, "wherein the demand data further includes the information specific to particular auction types such as the opening price and the successive decrements in case of descending ("Dutch") auctions. Again, Freeny clearly does not address auction methodologies or auction systems. Furthermore, Godin, which is not justifiably combinable with Freeny for the reasons previously discussed in section VIII. B. 1. above, does not specifically address implementing descending (Dutch) auctions with its auction system. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 5 and 24 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 5 and 24.

(g)   Dependent Claims 7, 9-11, 13-16, 26, 28-30, 32-35, 45, 47-49, and 51-54

The final Office Action of October 21, 2004 takes as Official Notice several elements provided by the Appellants' claimed invention. In particular, the Office Action uses Official Notice to reject claims dependent claims 7, 9-11, 13-16, 26, 28-30, 32-35, 45, 47-49, and 51-54. MPEP §2144.03 provides that an "examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being 'well-known' in the art," quoting *In re Ahlert*, 424 F.2d 1088, 165 USPQ 418, 420 (CCPA 1970). However, Appellants challenge how well-known it is to (1) estimate the market demand curve and the price elasticity for an auction item or product or service from a plurality of demand data sources as in the claimed invention; (2) suggest the discounting of a substitute of the product or item or service being auctioned as in the claimed invention; (3) suggest that the item being auctioned is a

competitor's item and the substituted product is promoter's own [item] as in the claimed

invention; and (4) suggest discounting of a cross selling or an up selling product to the product

being auctioned as in the claimed invention.

In Appellants' previous amendment filed on December 10, 2004, Appellants respectfully

made a demand for evidence which supports the proposition asserted in the Office Action as to

the whether the above-identified elements are in fact well-known. However, no evidence in

support of these assertions was ever provided by the Examiner. MPEP §2144.03 indicates that

the Examiner must provide evidence in the next Office Action. In this case, the Examiner had an

opportunity to provide evidence in the Advisory Action issued January 7, 2005, but chose not to.

MPEP §2144.03 goes on to indicate that "assertions of technical facts in areas of esoteric

technology must always be supported by citation of some reference work" and "allegations

concerning specific 'knowledge' of the prior art, which might be peculiar to a particular art

should also be supported." The Appellants suggest that the claimed invention may constitute

esoteric technology, and as such requires support by citation of some reference work by the

Examiner. Moreover, MPEP §2144.03 further states that "[t]he facts so noticed serve to 'fill the

gaps' which might exist in the evidentiary showing and should not comprise the principle

evidence upon which a rejection is based." Appellants suggest that the Office Action has used

the so-called well-known facts as the principle evidence to make its rejection and not merely to

"fill the gaps". Therefore, because the Examiner has not properly provided evidence as required

by MPEP §2144.03, the rejections to claims 7, 9-11, 13-16, 26, 28-30, 32-35, 45, 47-49, and 51-

54 based on Official Notice are improper and should be withdrawn.

(h) Dependent Claims 7, 26, and 45

Claims 7, 26, and 45 generally provide, "wherein said statistical means includes means for estimating the market demand curve and the price elasticity for an auction item or product or service for a plurality of demand data sources, and means for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity." Once again, Freeny clearly does not address auction methodologies or auction systems. The Office Action states that "the demand curves taught by Freeny, Jr. inherently provide price elasticity based on the results of the auctions for a plurality of products and a plurality of quantities." However, how can Freeny possibly teach or suggest this either explicitly or implicitly if Freeny does not discuss auctions in any manner? That is, Freeny has nothing to do with auctions as admitted on line 23, page 2 of the October 21, 2004 Office Action. Therefore, Freeny cannot inherently teach auctions either. The Office Action takes as Official Notice that these concepts are well known. However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 7, 26, and 45 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 7, 26, and 45.

(i) Dependent Claims 9, 28, and 47

Claims 9, 28, and 47 generally provide, "wherein said means for estimating the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and

the demand at zero price i.e. the size of the market wiling to buy the product at zero price." The Office Action takes as Official Notice that these concepts are well known. However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 9, 28, and 47.

(j)   Dependent Claims 10, 29, and 48

Claims 10, 29, and 48 generally provide, "means for suggesting the discounting of a substitute of the product or item or service being auctioned." The Office Action takes as Official Notice that these concepts are well known. However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 10, 29, and 48.

(k)   Dependent Claims 11, 30, and 49

Claims 11, 30, and 49 generally provide, "wherein said item being auctioned is a competitor's item and the substituted product is promoter's own." The Office Action takes as Official Notice that these concepts are well known. However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 11, 30, and 49.

(l)   Dependent Claims 13, 32, and 51

Claims 13, 32, and 51 generally provide, "suggesting discounting of a cross selling or an up selling product to the product being auctioned." However, as discussed above, Appellants

traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 13, 32, and 51.

(m)   Dependent Claims 14, 33, and 52

Claims 14, 33, and 52 generally provide, "wherein said means for estimating the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used." However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 14, 33, and 52.

(n)   Dependent Claims 15, 34, and 53

Claims 15, 34, and 53 generally provide, "wherein said means for estimating the market demand curve for an individual item uses demand data where multiple units of items are auctioned." However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 15, 34, and 53.

(o)   Dependent Claims 16, 35, and 54

Claims 16, 35, and 54 generally provide, "wherein said means for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels." However, as discussed above, Appellants traverse the manner in which the Official Notice is taken. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections

to claims 16, 35, and 54.

(p)   Dependent Claims 18, 37, and 56

Claims 18, 37, and 56 generally provide, "means for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs." First, Freeny does not teach auction methodologies or auction systems. Second, Godin would not be combinable with Freeny for the reasons previously discussed in section VIII. B. 1. above. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 18, 37, and 56 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 18, 37, and 56.

(q)   Dependent Claims 8, 27, and 46

Claims 8, 27, and 46 generally provide, "wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme." However, neither Freeny nor Godin discuss market segments. Therefore, neither Freeny nor Godin teach all of the elements of dependent claims 8, 27, and 46 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 8, 27, and 46.

(r)   Dependent Claims 12, 31, and 50

Claims 12, 31, and 50 generally provide, "wherein the means for obtaining the demand

data includes the ability to cover multiple market segments and suggest a promotion scheme

targeted at different market segments. However, neither Freeny nor Godin discuss multiple

market segments. Therefore, neither Freeny nor Godin teach all of the elements of dependent

claims 12, 31, and 50 contrary to the broad assertion in the Office Action. Therefore, the Board

is respectfully requested to reconsider and withdraw the rejections to claims 12, 31, and 50.

(s)   Dependent Claim 43

Claim 43 generally reiterates the features of claim 39. Therefore, for the reasons

previously discussed in section VIII. B. 1. above, Freeny in view of Godin does not teach the

features of claim 43. Therefore, the Board is respectfully requested to reconsider and withdraw

the rejection to claim 43.

(t)   Dependent Claim 58

Claim 58 generally provides, "wherein the system is extended to learn about the state of

online markets by mining information from current and past operations of similar online markets

in order to devise differential strategies for various market segments." However, there is no

supporting teaching in either Freeny or Godin of the features taught in claim 58. Case law

establishes that an obviousness rejection is improper if specific claimed features are not taught in

the prior art, but are instead rejected on inherency. See generally, In re Spormann, 363 F.2d 444,

448, 150 USPQ 449, 452 (C.C.P.A. 1966). Thus, the obviousness rejection based on inherency

for claim 58 is improper. Therefore, the Board is respectfully requested to reconsider and withdraw the rejection to claim 58.

(u)   Dependent Claim 59

Claim 59 generally provides, "wherein said system is also used to provide for implementing optimal inventory management." The Office Action on page 4, lines 11-13 indicates that Freeny's system monitors inventory levels and can adjust pricing accordingly. However, "optimal inventory management" does not simply refer to price adjustments according to inventor levels. Rather, "optimal inventory management" may refer to raw materials, purchased parts and supplies, labor, partially completed (in-process) products, component parts, working capital, tools, machinery, equipment, and finished goods, etc. Thus, the overly broad generalization that "optimal inventory management" simply equates to monitoring inventory levels and adjusting pricing accordingly is incorrect and improper. Therefore, the Board is respectfully requested to reconsider and withdraw the rejection to claim 59.

(v)   Dependent Claim 60

Claim 60 generally provides, "wherein said system is integrated with an online electronic coupon generation system to provide a complete system for issuing of redeemable electronic coupons." Clearly, the "system" which is being integrated with the online electronic coupon generation system is a system that has the ability to retrieve auction data from online auctions. However, Freeny does not teach auction methodologies or systems. Thus, the system of claim 60 is patentably distinct from the system in Freeny. Therefore, the Board is respectfully requested to reconsider and withdraw the rejection to claim 60.

(w)   Dependent Claim 61

Claim 61 generally provides, "wherein a generated market demand curve and said promotion scheme parameters are used to provide a data discovery service to a plurality of buyers in various market segments who use it for generating redeemable electronic coupons for their products or services." However, neither Freeny nor Godin discuss various market segments. Therefore, neither Freeny nor Godin teach all of the elements of dependent claim 61 contrary to the broad assertion in the Office Action. Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claim 61.

C.   CONCLUSION

In conclusion, the prior art references of record, either alone or in combination with one another, fail to teach essential elements of the Appellants' claimed invention. In many instances, there appears to be an unnecessarily broad interpretation of the prior art references as indicated in the Office Action. As indicated above, regardless of how each of the prior art references are interpreted they still fail to teach the Appellants' claimed invention as the prior art references either teach away from the Appellants' claimed invention, are contrary to the Appellants' claimed invention, or all together are bereft of any teaching whatsoever of the elements provided in the Appellants' claimed invention.

In fact, each prior art reference cited by the Examiner is complete and functional in itself, so there is simply no motivation to use parts from or add or substitute parts to any reference to try and teach, but failing nonetheless, the claimed invention. Moreover, because the references take mutually exclusive paths and reach different solutions to a similar problem, they essentially

teach away from each other, and thus it would not be logical for one of ordinary skill in the art to combine them. However, even if the references were legally combinable, as indicated above, the references would not teach the claimed invention because several claimed features are lacking in the prior art references. Furthermore, the several rejections based on Official Notice are demonstrated to be improper because the Examiner has failed to provide documented evidence in support of the precepts taken in Official Notice as previously requested by the Appellants.

In view of the foregoing, the Appellants respectfully submit that the cited prior art references do not teach or suggest the features defined by independent claims 1, 20, and 39 and dependent claims 2-5, 7-18, 21-24, 26-37, 40-43, 45-56, and 58-61 and as such, independent claims 1, 20, and 39 and dependent claims 2-5, 7-18, 21-24, 26-37, 40-43, 45-56, and 58-61 are patentable over Freeny alone or in combination with Godin or with Godin and concepts identified under Official Notice.

Accordingly, Appellants submit that claims 1-5, 7-18, 20-24, 26-37, 39-43, 45-56 and 58-61, all the claims presently pending in the application, are patently distinct from the prior art of record and are in condition for allowance. The Board is respectfully requested to cancel all of the rejections to the claims and to pass the application to issue. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1.   A computing system comprising at least one processor, associated memory, storage and input/output devices, said computing system being connected to a network of computing systems and being used to generate promotional scheme parameters for electronic coupons, said computer system comprising:

means for automatically obtaining market demand data from defined sources of online auctions,

means for conducting online actions using defined parameters for specified goods and/or services for getting market information, wherein said parameters comprise non-quantitative attributes comprising cultural attributes of bidders of said online auctions,

means for storing and analyzing the data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons, wherein said means for storing and analyzing the demand data is a statistical means that generates the promotion scheme parameters for different market segments and receives the data from an electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve generation of said promotion scheme parameters, and

means for generating said redeemable electronic coupons.

2.   The system of claim 1, wherein the means for obtaining demand data from online auction includes ability to access different types of auctions including sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

3. The system of claim 2, wherein said means for obtaining the demand data from online auctions is through software means to start capturing the demand data from the time the auction starts to the time it ends.

4. The system of claim 1, wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

5. The system of claim 1, wherein the demand data further includes the information specific to particular auction types including the opening price and the successive decrements in case of descending ("Dutch") auctions.

6. (Canceled).

7. The system of claim 1, wherein said statistical means includes:

means for estimating the market demand curve and the price elasticity for an auction item or product or service for a plurality of demand data sources, and

means for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

8. The system of claim 1, wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount,

market segment for the promotion scheme, duration of promotion scheme and identification of

methods of offering the scheme.

9.   The system of claim 7, wherein said means for estimating the market demand curve is by

considering the fractional demand at a particular price, the fraction of population that is willing

to pay the price, computing the product of the fractional demand and the demand at zero price

i.e. the size of the market wiling to buy the product at zero price.

10.   The system of claim 8, further comprising means for suggesting the discounting of a

substitute of the product or item or service being auctioned.

11.   The system of claim 10, wherein said item being auctioned is a competitor's item and the

substituted product is promoter's own.

12.   The system of claim 2, wherein the means for obtaining the demand data includes the

ability to cover multiple market segments and suggest a promotion scheme targeted at different

market segments.

13.   The system of claim 8, further including means for suggesting discounting of a cross

selling or an up selling product to the product being auctioned.

14.   The system of claim 9, wherein said means for estimating the demand curve uses the

winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions

while for the descending auctions namely, Dutch auctions only the winning bid is used.

15.   The system of claim 9, wherein said means for estimating the market demand curve for an individual item uses demand data where multiple units of items are auctioned.

16.   The system of claim 7, wherein said means for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels.

17.   The system of claim 9, wherein said means for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction.

18.   The system of claim 1, further including means for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

19.   (Canceled).

20.   A method for generating promotional scheme parameters using electronic coupons, characterized in that it includes:

        automatically obtaining market demand data from defined sources of online auctions,

        conducting online auctions using defined parameters for specified goods and/or services,

wherein said parameters comprise non-quantitative attributes comprising cultural attributes of

bidders of said online auctions,

storing and analyzing the market demand data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons, wherein storing and analyzing of the demand data is by a statistical method that generates the promotion scheme parameters for different market segments, and wherein storing and analyzing the demand data receives the data from an electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve generation of said promotion scheme parameters, and

generating said redeemable electronic coupons.

21. The method of claim 20, wherein obtaining demand data from online auction includes ability to access different types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

22. The method of claim 21, wherein obtaining the demand data from online auctions is through software to start capturing the demand data from the time the auction starts to the time it ends.

23. The method of claim 20, wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

24.   (Previously Presented) The method of claim 20, wherein the demand data further

includes the information specific to particular auction types such as the opening price and the

successive decrements in case of descending ("Dutch") auctions.

25.   (Canceled).

26.   The method of claim 20, wherein said statistical method includes:

        estimating the market demand curve and the price elasticity for an auction item or

product or service from a plurality of demand data sources, and

        determining if an item or product or service is amendable to price discrimination based

on said estimated demand curve and price elasticity.

27.   The method of claim 20, wherein said promotion scheme parameters include the

collection of items or products or services to be discounted, the amount of discount, the nature of

discount, market segment for the promotion scheme, duration of promotion scheme and

identification of methods of offering the scheme.

28.   The method of claim 26, wherein estimating of the market demand curve is by

considering the fractional demand at a particular price, the fraction of population that is willing

to pay the price, computing the product of the fractional demand and the demand at zero price

i.e. the size of the market willing to buy the product at zero price.

29.   The method of claim 27, further comprising suggesting the discounting of a substitute of

the product or item or service being auctioned.

30.   The method of claim 29, wherein said item being auctioned is a competitor's item and the substituted product is promoter's own.

31.   The method of claim 21, wherein obtaining of the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments.

32.   The method of claim 27, further comprising suggesting discounting of a cross selling or an up selling product to the product being auctioned.

33.   The method of claim 28, wherein estimating of the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used.

34.   The method of claim 28, wherein estimating of the market demand curve for an individual item uses demand data where multiple units of items are auctioned.

35.   The method of claim 26, wherein estimating of market demand curve uses the quantity demanded by an individual buyer at various price levels.

36.   The method of claim 28, wherein estimating of the market demand curve information

from the online auctions is used to determined the decrement size in a descending or Dutch

auction.

37.   The method of claim 20, further including method for the user to configure the sources of

online demand data as well as the parameters for conducting online auctions on a plurality of

products on specified URLs.

38.   (Canceled).

39.   A computer program product comprising computer readable program code stored on

computer readable storage medium embodied therein for causing a computer to generate

promotional scheme parameters using electronic coupons comprising:

computer readable program code means configured for automatically obtaining market

demand data from defined sources of online auctions,

computer readable program code means configured for conducting online auctions using

defined parameters for specified goods and/or services, wherein said parameters comprise non-

quantitative attributes comprising cultural attributes of bidders of said online auctions,

computer readable program code means configured for storing and analyzing the data

obtained from said online auctions or said conducted auctions to estimate demand and calculate

promotion scheme parameters for issue of redeemable electronic coupons, wherein said

computer readable program code means configured for storing and analyzing of the demand data

is a computer readable program code means that generates the promotion scheme parameters for

different market segments, and wherein storing and analyzing the demand data receives the data

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from an electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve generation of said promotion scheme parameters, and

computer readable program code means configured for generating said redeemable electronic coupons.

40.   The computer program product of claim 39, wherein said computer readable program code means configured for obtaining demand data from online auction includes ability to access different types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

41.   The computer program product of claim 40, wherein said computer readable program code means configured for obtaining the demand data from online auctions is through software to start capturing the demand data from the time the auction starts to the time it ends.

42.   The computer program product of claim 39, wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

43.   The computer program product of claim 39, wherein said computer readable program code means configured for storing and analyzing the demand data is a statistical computer readable program code means that generates the promotion scheme parameters for different market segments.

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44.   (Canceled).

45.   The computer program product of claim 39, wherein said statistical computer readable program code means includes:

computer readable program code means configured for estimating the market demand curve and the price elasticity for an action item or product or service from a plurality of demand data sources, and

computer readable program code means configured for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

46.   The computer program product of claim 39, wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme.

47.   The computer program product of claim 45, wherein said computer readable program code means configured for estimating the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market willing to buy the product at zero price.

48.   The computer program product of claim 46, further comprising computer readable

program code means configured for suggesting the discounting of a substitute of the product or

item or service being auctioned.

49.   The computer program product of claim 48, wherein said item being auctioned is a

competitor's item and the substituted product is promoter's own.

50.   The computer program product of claim 40, wherein the computer readable program code

means configured for obtaining the demand data includes the ability to cover multiple market

segments and suggest a promotion scheme targeted at different market segments.

51.   The computer program product of claim 46, further including computer readable program

code means configured for suggesting discounting of a cross selling or an up selling product to

the product being auctioned.

52.   The computer program product of claim 47, wherein said computer readable program

code means configured for estimating the demand curve uses the winning bid and the highest

bids of all the bidders for the case of open-cry or ascending auctions while for the descending

auctions namely, Dutch auctions only the winning bid is used.

53.   The computer program product of claim 47, wherein said computer readable program

code means configured for estimating the market demand curve for an individual item uses

demand data where multiple units of items are auctioned.

54.   The computer program product of claim 45, wherein said computer readable program code means configured for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels.

55.   The computer program product of claim 47, wherein said computer readable program code means configured for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction.

56.   The computer program product of claim 39, further including computer readable program code means configured for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

57.   (Canceled).

58.   The system of claim 1, wherein the system is extended to learn about the state of online markets by mining information from current and past operations of similar online markets in order to devise differential strategies for various market segments.

59.   The system of claim 1, wherein said system is also used to provide for implementing optimal inventory management.

60.   The system of claim 1, wherein said system is integrated with an online electronic

coupon generation system to provide a complete system for issuing of redeemable electronic coupons.

61.   The system of claim 1, wherein a generated market demand curve and said promotion scheme parameters are used to provide a data discovery service to a plurality of buyers in various market segments who use it for generating redeemable electronic coupons for their products or services.

IX.   EVIDENCE APPENDIX

There is no other evidence known to Appellants, Appellants' legal representative or Assignee which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

X.   RELATED PROCEEDINGS APPENDIX

There are no other related proceedings known to Appellants, Appellants' legal representative or Assignee which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.